may take a number of forms, the embodiment shown in FIG. **1** is intended to represent a standard Radio Shack TRS-80 Model 100, NEC 8201A, or other similar portable computer. Such a portable computer typically has at least the following features: LCD alpha-numeric display **42**; keyboard **44**, including both typewriter keys and programmable function keys; RS-232 port; parallel printer interface; built-in modem; cassette interface; bar code reader interface; external power adaptor; and 32 kilobytes of internal random access memory.

Routines performed by the service console **40** in response to service personnel may be performed in relation to the central controller **160** when connected through the RS-232 port *24b*, as shown in FIG. **1**. After an appropriate routine to establish the identity of the service person, service console **40** may cause central controller **160** to provide information about the number of coin pulses per selection, the number of magazines **58** in the system, any specific selection in the selection table, the contents of the playing queue, the stimulation time out period, the contents of the category table, and the contents of the production company name table. When these items of information are retrieved, the service person may modify them, using the service console **40**. In addition, the service console **40** may be used to command that a video disk menu be reloaded from one of the disks **52**; that a video disk menu be reloaded from an entire magazine **58** of video disks; that the accounting data from the central controller **160** be provided to the service console **40** for each selection; that the number of times played for all selections be reset to **0**; that a new video disk menu be loaded from a bar code reader or cassette (not shown) into the central controller **160**; that a video disk menu be stored on the cassette; that central controller **160** suspend system operations and allow direct control of robotic arm control **170** from service console **40** by sending commands through central controller **160** to robotic arm control **170**; and that central controller **160** reset all queues and restart the entire system. In addition, service console **40** may be used to obtain reports through the parallel printer interface for listing the accounting data or the most popular selections.

The above-described embodiment of the invention is especially suited to use as a video jukebox or replay system. The invention may, however, be embodied in many other forms, including the interactive video system described below.

IV. Interactive Video System

The present invention is useful in many environments in which a large amount of information is presented visually to a user. An embodiment in which a user may interactively access such information is illustrated in FIGS. **17** and **18**.

The interactive embodiment shown in FIG. **17**, includes at least two kinds of memory storage units, such as floppy disks or any other memory in response storage system **370** and video disks in video disk player system **350**. Each type of storage unit could have a corresponding servoarm or other stacker system, and the storage units would be loaded in pairs with one type of storage unit, such as the floppy disks, storing the user response after processing and perhaps controlling the operations of the central controller **360** or of a larger data processing system, and the other storage unit, such as the video disks, providing the appropriate display on menu/display terminal **330** in response to commands from the central controller **360**. In this embodiment, the user could access a series of displays in an interactive manner using input device **340**, such that the user's response to each display would select the subsequent display.

FIG. **18** shows the basic steps of a method of operation of such an interactive video system. The central controller **360** or other control means will first receive an access code entered by the user, as shown in box **410**. If the access code is valid, controller **360** will cause a display of video information from video disk player system **350** on terminal **330**, as shown in box **420**. The display will continue until a user response from input device **340** is received, as shown in box **430**. Controller **360** will then process the response and record it or some summary or other processed form of it in response storage system **370**, as shown in box **440**. Controller **360** may then continue with a display in response to the user response, repeating the steps in boxes **420–440**. It may also evaluate and display the user response, as shown in box **450**.

This interactive system could be used in many educational or entertainment situations to access visual data according to a user's response. The result could be a highly realistic simulation of a real-life situation, such as the operation of an automobile or airplane. More importantly, this embodiment would expand the data base and its interactive feature to permit access to a much greater quantity of information without manual involvement and could make the data base available as an organized library to many users.

V. Miscellaneous

The video replay system of the present invention has been described in detail, but many variations will suggest themselves to those of ordinary skill in the art. For example, it will be apparent that the present invention is not limited to audio/video information, but may be used for any information retrieval system in which information is stored on storage units and retrieved for presentation or editing purposes at remote terminals. Such a system may use any type of disk, including diskettes and phonograph records, and may use any appropriate reading device, either for storing or retrieving information. In addition, the user units needs not be limited to CRT displays, but may include any appropriate device for presenting information retrieved from the disks. In addition, the service console **49**, rather than being a portable unit, may be built into the central unit **20** in such a manner that it is only accessible to service personnel.

As noted above, the invention may be used for educational or entertainment purposes. In particular, in addition to the embodiments disclosed above, the invention could be used in an educational embodiment in which a student could access any desired information within the system from one of the user stations. In this embodiment, the students could not typically be required to insert coins before use, but would have an allocation of time or an access code or access card, so that the control means would store the amount of time for each user or would store an indication of the time to be charged to the access code or card used.

Another embodiment of interest is a video game embodiment, in which a variety of video games are stored on disks or tapes and made available to users, each of whom accesses a game through a user station. The system could be arranged with a single user station and a large number of games available to a user at that station, or, a number of user stations could be provided,